



Talking Y2K

U.S. Army Environmental Center Tackles Its 'Year 2000' Computer Issues

January 1999: The countdown is on. You've heard rumors and seen reports about what might happen to the rest of the country, but will the Year 2000 computer "bug" bite the U.S. Army Environmental Center? Are the Center's computers destined to fail when the new millennium arrives?



Not likely. Here is a look at how the Center has stayed ahead of potential "Y2K" problems — and why January 3, 2000 will be just another workday at USAEC.

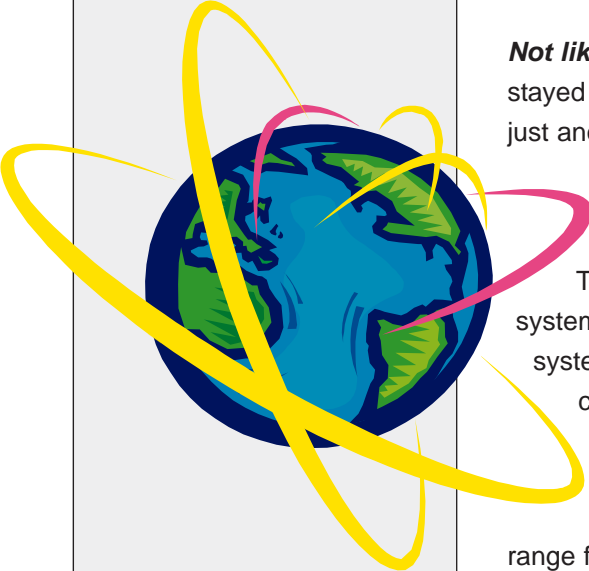
Disasters . . . or Slight Disruptions?

The Year 2000 problem, known generally as "Y2K," stems from computer systems programmed to process only the last two digits of a year. These systems assume that the first two digits are 1 and 9, so when the date changes to 2000, they may read it as 1900.

Though the problem affects computer systems around the world, no one seems to know for sure what will happen. Predictions for the new year range from complete system shutdowns to minor program errors and quirks. Year 2000 preparation has become a national priority, with government agencies alone expected to spend more than \$6 billion on Y2K compliance efforts.

The Defense Department operates 2,581 computer systems deemed "mission critical" — more than four times that of any other federal agency. The military counts on computers for everything from basic business functions, such as managing payrolls and personnel, to strategic and tactical operations like mobilizing forces and assessing conditions on the battlefield.

The situation is less daunting at USAEC, where we could do our jobs despite computer and software glitches. The Center depends on various systems to analyze and manage the Army's environmental information, and erroneous dates in some applications could affect our mission to track and accurately report on the Army's environmental programs. But the chances of that happening are remote — now that our software systems and equipment are Y2K compliant.



"I think we have put our arms around the problem. We will do the job of defending the United States of America on January 1, 2000."

John Hamre, Deputy Secretary of Defense

A Head Start



USAEC began examining how "Y2K" might affect its operations in 1997.

Government staff and contractors looked at every software system and computer we use at the Center, assessing which met Y2K standards and which were vulnerable to the so-called "millennium bug." Some programs that operated on two-digit years were repaired to recognize four digits. A few systems were retired and others have been or will be replaced this year.

USAEC will meet the Defense Department's March 1999 deadline for full Y2K compliance. It's a true success story, especially given that, according to the Office of Management and Budget, only 61 percent of the federal government's critical systems were Year 2000 compliant in November 1998.

Strategies and Solutions

USAEC has followed Army and Defense Department management plans to prepare for the Year 2000. This mainly involves a five-step "resolution" process of:

- * Awareness (education and planning).
- * Assessment (figuring the scope of impact and analyzing devices and systems).
- * Renovation (fixing the systems).
- * Validation (testing the "fixed" systems).
- * Implementation (making sure the tested systems are fully operational).

USAEC staff, contractors and software developers went through in-house and Armywide applications, using detailed checklists to assess whether the programs used two- or four-digit dates and how they treated date-sensitive information. The few programs with problems were fixed; the ones without obvious problems were tested under a range of date-and-time scenarios.

Passing Grades

A Year 2000 status report on USAEC's software, hardware and equipment:

Software

- ✱ USAEC's Information Management Branch and contractor staff assessed applications on the Local Area Network, those developed in-house as well as commercial off-the-shelf products. Many were ready for the Year 2000. The in-house programs with Y2K issues were modified; the outdated commercial applications are being upgraded or fixed with "patches" from their manufacturers. All local applications will be ready by March.
- ✱ Y2K issues were identified in two Armywide software programs that USAEC manages: the Installation Restoration Data Management Information System (IRDMIS) and the Environmental Compliance Assessment System (ECAS). Information in the IRDMIS database was modified to reflect four-digit years; USAEC also replaced the outdated IRDMIS data-collection tool with a Y2K-compliant, Web-based program. The DOS-based Environmental Compliance Assessment System (ECAS) will be replaced this year by the Y2K-ready Windows Compliance Assessment System (WINCASS).
- ✱ The Defense Environmental Security Corporate Information Management (DESCIM) office and the Office of the Secretary of Defense are testing and validating software in the DESCIM collection. USAEC served as an "independent" tester for a handful of DESCIM modules, including the Environmental Program Requirements-Module (EPR-M), the Defense Site Environmental Restoration Tracking System (DSERTS) and the Environmental Quality Report (EQR). All passed initial Y2K tests.

John A. Koskinen, who leads President Clinton's Council on Year 2000

Conversion, predicted in The Washington Post that the Y2K bug's impact will be similar to a winter storm: minor inconveniences for some people and severe — but short-term — disruptions for some communities. "We still don't know how many storms there will be, but the risk is localized storms, not national debacles," he said.



Hardware and Operating Systems

All the personal computers and laptops supported by USAEC's Information Management Branch are Y2K compliant, as are the network servers and the major operating systems, Windows NT and Windows 95. The Center's UNIX database servers have been upgraded to Y2K-compliant operating systems.



Other Equipment

Though fax machines and copiers may display dates, none of this equipment at USAEC is at serious risk for Y2K problems. The Center's VCRs and other audio/visual tools are also considered safe. Date changes aren't expected to affect local operation of modems, cellular phones or pagers, provided national communications networks operate.

Y2K and You

Given a healthy "Y2K" prognosis, USAEC can look forward to continuing its strong support of Army readiness, stewardship and quality of life well into the next century. The Center has worked hard over the last two years to make sure that business will go on as usual; fixes made to programs during 1999 will be small and most likely transparent to users.



* Stay Informed *

Locally, the USAEC Information Management Branch will keep Center personnel informed on Y2K issues through e-mail bulletin boards, special messages and the INFOMAN newsletter. As always, if you suspect any problems with your system, call the USAEC Help Desk at 5-1244.

You can follow the progress of the Armywide Y2K effort by checking into the Army's "Year 2000" site at www.army.mil/army-Y2k/Home.htm. The President's Council on Year 2000 Conversion offers a hotline (1-888-USA-4Y2K) through which callers can get free information on areas such as power, telephones, banking, government programs, and household products. You can also visit the council's Web site at www.y2k.gov.